

REMARKS/ARGUMENTS

Initially, Applicant would like to express his appreciation to the Examiner for the detailed Office Action provided. Claims 1-15 are currently pending, and after entry of the present amendment claims 5, 13 and 14 will have been canceled. Applicant respectfully requests reconsideration of the outstanding rejections, and allowance of all the claims pending in the present application.

SUMMARY OF THE OFFICE ACTION

The Office Action objects to claims 8 and 9 based upon some relatively minor formalities. Claims 1-15 are finally rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 1-9 and 11-15 are finally rejected under 35 U.S.C. § 103(a) as being unpatentable over KOBAYASHI et al. (U.S. Patent No. 5,822,210) in view of FUJIWARA et al. (U.S. Patent Application Publication No. 2003/0139176). Claim 10 is finally rejected under 35 U.S.C. § 103 (a) as being unpatentable over KOBAYASHI et al. in view of FUJIWARA et al. and further in view of WATANABE et al. (U.S. Patent No. 5,400,497).

THE OBJECTION TO CLAIMS 8 AND 9

The Office Action objects to claims 8 and 9 based upon some relatively minor formalities, and to overcome the objection, Applicant has amended claims 8 and 9 as suggested by the Examiner. Accordingly, the Examiner is respectfully requested to withdraw the objection to claims 8 and 9.

THE REJECTION UNDER 35 U.S.C. § 112

Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. In order to overcome the rejection under 35 U.S.C. § 112, claims 1 and 6 have been amended, as suggested by the Examiner. Accordingly, the Examiner is respectfully requested to withdraw the rejection under 35 U.S.C. § 112.

THE REJECTION UNDER 35 U.S.C. § 103(a)

The Official Action has finally rejected claims 1-9 and 11-15 under 35 U.S.C. § 103(a) as being unpatentable over newly cited KOBAYASHI et al. (U.S. Patent No. 5,822,210) in view of FUJIWARA et al. (U.S. Patent Application Publication No. 2003/0139176). Claim 10 has been finally rejected under 35 U.S.C. § 103 (a) as being unpatentable over KOBAYASHI et al. in view of FUJIWARA et al. and further in view of WATANABE et al. (U.S. Patent No. 5,400,497).

In order to distinguish independent claims 1 and 6 from the newly cited prior art, claims 1 and 6 have been amended to include the features of dependent claims 5, 13 and 14 which have been canceled. Applicant respectfully submits that these amendments should not raise new issues or require a new search, because the subject matter of the amendments was previously presented in the now canceled dependent claims, and has already been considered by the Examiner. Canceled dependent claims 5, 13 and 14 are directed to further defining the maintenance data to include history data including performance of the removable device and history of repair. Applicant respectfully submits that the cited prior art taken alone or in any proper combination

does not disclose a system or method for managing a removable device that is attachable to an apparatus and is removable from the apparatus including, *inter alia*, a plurality of removable devices each of which has an identification code for identifying the corresponding removable device; a database for storing maintenance data for each removable device, the maintenance data including location data indicating the location of the removable device; and wherein the maintenance data further includes history data including performance of the removable device and history of repair.

The Office Action asserts on page 4 that KOBAYASHI et al. discloses the number of parts remaining in a cartridge and that such information is “maintenance data”. In support of this assertion, the Office Action specifically makes reference to Fig. 14, reference number 102 of KOBAYASHI et al. The Office Action on page 7 further asserts that the col. 15, lines 44-45 discloses history data including performance of the removable device and history of repair. The cited portion of KOBAYASHI et al. states, “The number [of parts] is decremented at completion of mounting.” Applicant, however, respectfully submits that KOBAYASHI et al. do not disclose maintenance data that includes history data including performance of the removable device and history of repair as asserted in the Office Action. At most, KOBAYASHI et al. disclose data relating to the number of parts, which Applicant submits is not maintenance data of the type disclosed and claimed by Applicant. It should be noted that Applicant’s claimed maintenance data relates to the removable devices which are used to mount components. The asserted maintenance data of KOBAYASHI et al., however, relates to the components instead of the removable device. Applicant, therefore, respectfully submits that the claimed invention is

different from the teachings of KOBAYASHI et al.

FUJIWARA et al. disclose a notification system which transmits a “stockout warning notification” for notifying a user when to restock inventory after a predetermined period (*see* FUJIWARA et al., paragraph [0153]). The system may also be used for maintenance and inspection of *components* (*see* FUJIWARA et al., paragraph [0129]). Applicant respectfully submits that FUJIWARA et al. also do not disclose maintenance data that includes history data including performance of the *removable device* and history of repair.

WATANABE et al. appear to be substantially cumulative of KOBAYASHI et al. and FUJIWARA et al. and do not disclose maintenance data that includes history data including performance of the removable device and history of repair. Similar to KOBAYASHI et al. and FUJIWARA et al., WATANABE et al. disclose a system for tracking the quantity of parts (i.e., workpieces) including the desired number of parts taken from a parts unit. See, col. 6, lines 46-68 and Fig. 4.

As described at page 3, line 1 of the present application, in a conventional plant for mounting electronic components, there are a number of removable devices, including parts cassettes and suction nozzles, and the location and the history of each removable device is not managed. Thus, even if regular and efficient maintenance is followed to ensure a stable feeding operation, it is not possible to identify a parts cassette or suction nozzle which requires maintenance or to know the history of that particular parts cassette or suction nozzle. This lack of

information prevents accurate maintenance, and it makes impossible to ensure that all the parts cassettes are capable of performing a reliable feeding operation. As a result, production may be stopped because of the unreliable feeding of components from a parts cassette during production or because of an unreliable suction nozzle. The prior art fails to recognize that the lack of history data including performance of the removable device and its history of repair may adversely affect the operation of the entire mounting line in an electronics components mounting plant.

Applicant respectfully submits that KOBAYASHI et al., FUJIWARA et al. or WATANABE et al. do not recognize the problem and do not disclose the use of maintenance data that includes history data including performance of the removable device and history of repair. Accordingly, Applicant believes that amended independent claims 1 and 6 are patentable over any proper combination of KOBAYASHI et al., FUJIWARA et al. or WATANABE et al. which do not disclose the claimed history data including performance of the removable device and history of repair, in the claimed combination.

DEPENDENT CLAIMS 2-4, 7-12 AND 15

With regard to claims 2-4, 7-12 and 15, Applicant asserts that they are allowable at least because they depend, directly or indirectly, from independent claims 1 or 6, which Applicant submits has been shown to be allowable, as well as based upon their own combination of recitations. Accordingly, Applicant respectfully requests reconsideration of the outstanding rejections and an indication of the allowability of all of the claims in the present application.

CONCLUSION

Applicant submits that the present application is in condition for allowance, and respectfully request an indication to that effect.

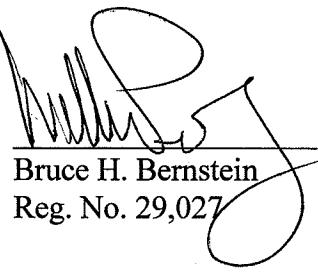
If any extension of time is necessary, this is an express request for any necessary extension of time and authorization to charge any required extension of time fee or any other fees which may be required to preserve the pendency of the present application to Deposit Account No. 19-0089.

Any amendments to the claims which have been made in this Reply, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attached thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

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